

## Iowa Native Prairie Planting Guide

# Planting Native Prairie Into Corn/Bean Stubble



### Soybean Stubble (Spring Seeding)

- 5 to 7 Days Before Planting** - Apply glyphosate herbicide to kill emerged weeds. If you are planting early (March 15-April 15), evaluate the field to see if emerged weeds are present before spraying.
- Planting Day** - Use a no-till drill or broadcaster to plant a mix of native grasses and forbs. Plant shallow (1/8" for forbs, 1/4" for grass), since forbs germinate well on the surface. Don't till soybean stubble - untouched bean stubble is an ideal seedbed.
- Roll (Cultipack) After Planting** - If you broadcast seed, roll after planting to improve seed to soil contact and help decrease seed predation.



### Corn Stubble (Spring Seeding)

#### Option 1 - No-Till

Follow the same guidelines as above for bean stubble with the following considerations:

- » Drilling into corn is more challenging than soybeans due to the amount of residue. Low humidity days will help.
- » Broadcasting is not recommended due to the amount of corn residue. *Broadcasting is not allowed in the NRCS 327 Conservation Cover Practice Standard.*
- » Baling cornstalks is a way to reduce the residue without tillage and reduce erosion concerns from the site. Do not mow stalks before baling. You want some residue (30%–40%). *When residue is removed, broadcasting seed is allowed in the NRCS 327 Standard.*

#### Option 2 - Use Tillage

- Till Cornstalks** before planting to reduce residue. Approximately 50% of the soil should be showing. Time the second trip within a few days before planting to kill emerged weeds.
- Roll (Cultipack) Area** once or twice to create a firm seedbed. *Your footprint should not sink in more than 1/8". Rolling is critical to keep the forb seed shallow.*
- Plant**, drill or broadcast seed.
- Roll (Cultipack) again** after planting.





## Fall/Dormant Seeding

Fall/Dormant seedings can take place Nov. 15 through April 1, or until the freeze/thaw season ends.

- » Advantageous to the forb component. Germination increases for many forb species if they go through freeze/thaw cycles.
- » In diverse forb mixes, seed 0.25 lbs./acre each (4 oz. or 1.0 seed/ft<sup>2</sup>) of Big Bluestem, Indiangrass, and Switchgrass. Dormant seedings are not as conducive as a spring planting for the tall warm season grasses. For spring plantings, use 0.1 lbs. (1.6 oz. or 0.4 seeds/ft<sup>2</sup>) to 0.25 lbs. (4 oz. or 1.0 seed/ft<sup>2</sup>) of each seed, as recommended.
- » Ideal seedbed is untilled soybean stubble.
- » Plant: drill (if ground isn't frozen) or broadcast seed and then roll.
- » Don't broadcast on ice covered ground, snow crusted ground, or when snow cover is > than 4".



## Other Considerations:

- » Residual herbicides from the previous crop can impact prairie establishment. Consider herbicide products to use on prairies that are less likely to carryover. Some contact herbicides have no residual or limited residual.
- » Seed forbs on the surface or a shallow depth (up to 1/8" depth). Grasses do fine planting up to 1/4" depth. *Seed on the surface is ok (up to 40%).* Tip: When using a native grass drill, disconnect every other tube on the forb box, so seed lands on the ground.
- » If you are trying to complete a seeding in an area with reed canary, develop a long-term plan to kill it completely (very difficult) and a proper seed mix that will compete with it.
- » Do not use fertilizer because it will only help the weeds out-compete your seeding.
- » When broadcasting, rolling will help with seed to soil contact and to reduce predation of seed from birds, mice, and night crawlers.
- » When seeding small areas or when broadcasting seed, add a carrier to help ensure you don't run out of seed (i.e. rice hulls, paper mulch, pell lime, ground cobs). Consider broadcasting the area twice to ensure good coverage.
- » On small areas (< 2 acres), you can seed from a bucket.
  - Flag off lines every 50' to help stay in line.
  - Use sand as a carrier — 2 parts sand to 1 part seed, minimum.
  - Weigh seed and separate into buckets.
- » Adding ½ - 1 bu. of oats to spring seedings can reduce erosion. NRCS 327 Standard requires ½ bu. on slope > 5% when seeding on tilled land. Mow before seed head emergence to allow light and to preserve moisture for seedlings.
- » For High-end Seedings (pollinator / CP-25 / prairie reconstruction):
  - Ideal mix is: 50% grass/50% forbs.
  - Strive for diversity.
  - Limit tall grasses (Big Bluestem, Indiana, and Switchgrass) to .25 lbs./acre each ((4 oz. or 1.0 seed/ft<sup>2</sup>)). They grow quickly and can out-compete forbs in the establishment. It's still important that they are in the mix.
  - Consider using high-end seedings around the farmstead for added beauty.
  - Consider Iowa ecotype seed (Iowa prairie remnant plants) for long-term to permanent seedings.

If you have additional questions, contact your local NRCS Field Office, Iowa Department of Natural Resources (DNR) biologists, or Pheasants Forever biologist for further guidance.

